

**High precision, multi-function, digital temperature and
humidity data logger**

HK-J8A102/HK-J8A103



Please read this manual carefully before using this product



DIRECTORY

- 1. Brief Introduction**
- 2. Product features**
- 3. Descriptions**
- 4. Operation**
- 5. Maintenance**
- 6. Specification**

1. Brief introduction

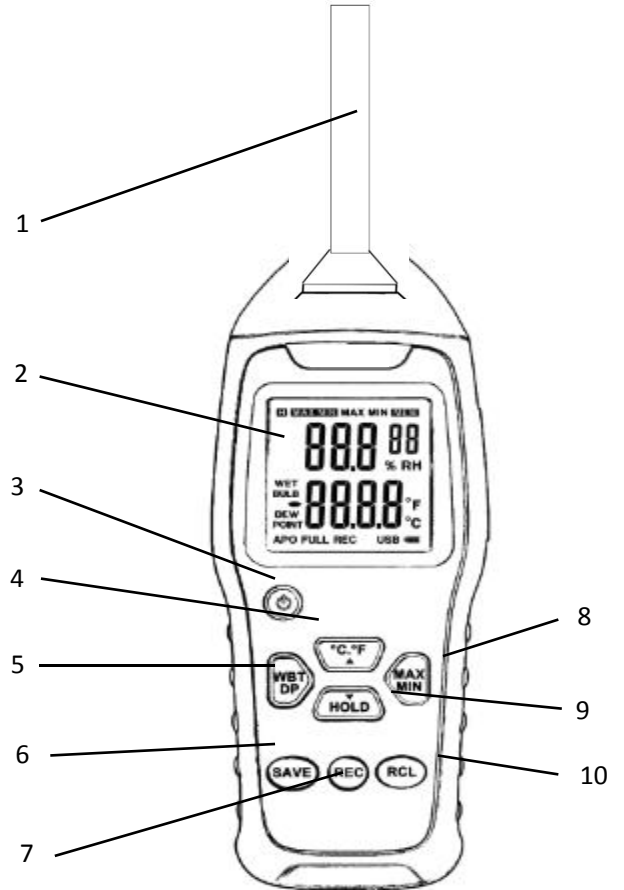
Our HK-J8A102/HK-J8A103 multifunctional digital temperature and humidity meter is an industrial grade, high precision temperature and relative humidity measuring instrument. The meter is powered by 9V battery and adopts high-precision prob. It has the functions of measuring humidity, temperature, dew point temperature and wet bulb temperature, which can easily meet the requirements of accurate measurement of temperature and humidity in various occasions. This product is an ideal choice for temperature and humidity measurement in laboratory, industry and engineering.

2 Product features

- Adopts high precision temperature and humidity probe with stable and accurate readings
- large screen LCD, easy to read
- The measurements are calculated every 10 milliseconds, quick response
- Can simultaneously measure the environment temperature, dew point temperature and wet bulb temperature
- Can store 99 datas
- The temperature units °C and °F can be switched
- Maximum and minimum measurement function
- Backlight display, can also be used normally in dark environment
- Ultra-low power consumption, a 6LR61 9V alkaline battery can last 300 hours
- External 9V DC power supply can be connected to meet the requirement of long time measurement
- Data records and USB interface
- Data hold functions can freeze the current readings
- Set aside IoT IoT function
- Automatic shutdown without 20 minutes' operation

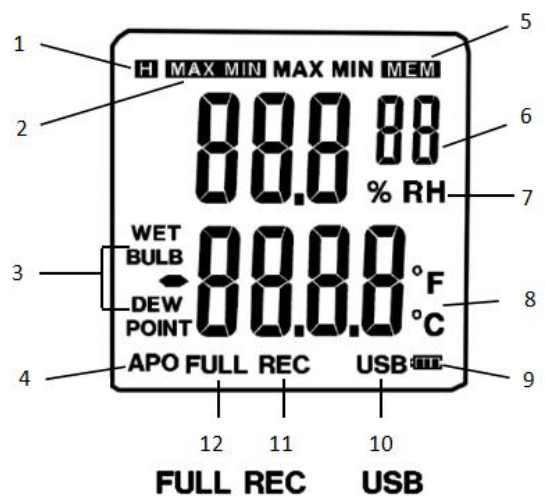
3. Descriptions

1. Sensor and protection housing
2. Display screen
3. Power switch
4. °C and °F unit selector switch
5. Dew point temperature/wet bulb temperature /ambient temperature selection
6. Data store
7. Record button
8. Maximum value and minimum value button
9. Data hold button
10. Data invocation



<Display indicator>

1. Data hold is enabled and the display freezes the current reading
2. Max min recording mode enabled, showing Max reading, min reading
3. Display wet bulb temperature or dew point temperature
4. Automatic shutdown reminding
5. Display the reading from memory
6. Memory location number taken from memory reading
7. Unit of measurement for relative humidity
8. Temperature unit
9. Battery level indicator
10. Connect to computer USB logo




11. Recording marks

12. Record full mark




Notes : The DC9V power interface and Macro USB interface are located on the side of the thermohygrometer, and the battery position is on the back of the thermohygrometer.

4. Operation

<Start Measuring>

- 1) Take out the meter from protective casing, press the button  in the upper left to open the instrument;
- 2) Keep the meter in the environment to be measured and take appropriate time to stabilize the reading;
- 3) Press the ° C. ° F key to select the temperature unit to read.

<Dew point temperature and wet bulb temperature>


When the meter is just started, it shows the ambient temperature. To show dew point temperature (DP) , press  . pressing  again can switch to wet bulb temperature (WBT) . Pressing  again can return the meter to the ambient temperature. When selecting dew point temperature and wet bulb temperature, a symbol will be displayed on the display.

<MAX/MIN mode>











- 1) You must first select the wet ball, dew point, or environment to read the corresponding Min Max (Min, Max) read value.
- 2) Press the MAX/MIN button once, the meter enters MAX/MIN mode, “MAX” will appear on the scree, the meter will also only display and freeze the maximum read value. Only after a higher reading value is measured will the display be updated.
- 3) Press the MAX/MIN button again. MIN display icon will appear, the meter will also only display and freeze the minimum read value. The display is updated only after a lower reading is measured.

- 4) Press MAX/MIN again. MAX MIN display icon will start blinking, the meter will also display the current read value, but will continue to record the maximum and minimum values.
- 5) Press MAX/MIN again to loop the MAX (maximum) and MIN (minimum) values.
- 6) To exit the MAX MIN mode, hold the MAX/MIN button for 2 seconds until the MAX and MIN ICONS completely disappear.
- 7) Note: When MAX/MIN mode is enabled, the temperature switch (° C.° F), SAVE, RCL (call) and HOLD buttons, as well as APO(auto power off) functions are disabled.

<Data-hold>

Press the HOLD button to HOLD the read value displayed, the meter stops measuring. “” will appear on the screen. Pressing HOLD again can return to normal working mode.

<Save and invoke readings>

- 1) The meter can hold up to 99 sets of read values for later calls. Each memory location holds relative humidity as well as ambient, dew point, and wet-bulb temperature values.
- 2) Press  to save the current reading to a memory location.  and the memory location number appear on the display, indicating that the reading has been saved.. Press  the display returns the current reading. After all 99 memory locations are used up, subsequent saved data is overwritten from the first memory location.
- 3) Press  to call a reading held in memory. Press  or  until the memory location you need is displayed. To return the meter to normal operation, press  2 seconds.
- 4) When a memory location is called, the default displays the relative humidity and ambient temperature values held at that location. Press  loop toggles the saved Wet Bulb, Dew Point, and Ambient temperature values at the displayed memory location.
- 5) If you want to clear all 99 memory locations hold dat, press  button and  at least 5 seconds.

<Backlight>

Hold down  button 3 seconds, turn on or turn off the backlight.

<Record mode>

The temperature and humidity meter has recording function. Please connect the meter to the computer via Marco USB before starting the record. The Smart Logger upper computer software was used to set the instrument. Set the record start mode to By Button. After setting the parameters, disconnect the instrument from the computer, press the REC key to start the recording function, long press the REC key to pause the recording.

In the recording mode, please do not turn off the power, otherwise you need to use the computer again to set the instrument. In the recording mode, in order to reduce power consumption, the instrument will automatically turn off the backlight function after 2 minutes of keyless operation. When the memory is FULL or the specified number of records is reached, the meter will automatically shut down. When the memory is FULL, the LCD screen will display the FULL icon.

<Auto power-off>

- 1) To extend battery life, the thermohygrometer will shut down automatically after no operation for about 20 minutes (Automatic Power Off) 。
- 2) In recording mode, or when connecting to UCB, the 20-minute auto shutdown function (APO) is automatically disabled until the set number of records is reached.
- 3) To disable the APO function, simply press the power button and the APO icon on the LCD screen disappears.

5. Maintain


<Cleaning and storage>

To avoid damaging the instrument case, do not use corrosive or solvent to clean the instrument. Wipe the case with a clean wet cloth and detergent.

Store the instrument in an appropriate area of temperature and humidity.

<Replace battery>



When the battery is low, low power symbol ”” will appear on the LCD. Please replace the 9V battery and lock the battery compartment.

Do not discard old batteries or rechargeable batteries into household garbage.

As consumers, users are required by law to bring their used batteries to the appropriate collection point, the retail store where the batteries are purchased or any place where the batteries are sold.

Discard: Do not discard this meter into household waste. The user has the obligation to send the expired equipment to a collection point dedicated to the electronic equipment.

<Cautions>

This product belongs to precision instrument, please note when using:

Do not touch the sensor with your hands.

Do not expose the sensor to sunlight.

Do not immerse the sensor or meter in the liquid. Sensor is only used in the air.

Exposure to extreme working conditions or chemical vapor may affect the accuracy of the instrument or even damage the instrument.

5) When this instrument is used to measure the humidity of the chemical vapor, the diffusion of chemical substances in the sensor results in the decrease of the accuracy and sensitivity of the instrument, which can be placed in a pure environment for a long time and can be recovered slowly.

6) When not in use, please put on a protective case to prevent contamination of the sensor probe.

6. Specifications

Environment temperature	
Probe type	RHT3X
Measurement range	-20 to 60°C (-4 to 140°F)
Accuracy	20 to 60 °C, ±0.1 °C @25°C (77°F), Other precision is optional
Resolution	0.01°C/°F
Sampling frequency	1 time per second
Relative humidity	
Probe type	RHT3X
Measurement range	0~100%RH
Accuracy	±1.5 % RH (0 to 80 % RH) @25 °C(77 °F), Other precision is optional
Resolution	0.1%RH
Response time	Less 10S (90% 25°C , wind speed 1m/s)
Other	
Wet bulb temperature range	-20 to 60 °C (-4 to 140 °F)
Dew point temperature range	-50 to 60 °C (-58 to 140 °F)
store-in	99 groups
Power	A standard 9V 6LR61 or 6F22 battery
Battery life	About 300 hours (use 6LR61 9V alkaline battery)
Records	32000 records
Operating environment	0 ~ 40°C (32 ~ 104°F), < 80% RH Non - Condensing
storage environment	-10~ 60°C (14 ~ 140°F), <80% RH Non - Condensing
Weight and size	About 200g (Battery included) , 215mm*58mm*33mm